

RUTGERS COOPERATIVE EXTENSION

NEW JERSEY AGRICULTURAL EXPERIMENT STATION

Beef Cow Condition Scoring

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Profitability in the cow-calf business is greatly influenced by the percentage of cows calving every 12 months. Proper nutrition 45 to 60 days before and 90 days after calving is the most critical factor in the cow's ability to rebreed and maintain a 365-day calving interval. If cows are underfed during this period, they will take longer to begin to go into heat and longer before they have their next calves.

Because the relation between nutrition and reproductive performance is so important, beef producers need a quick, reliable way to evaluate whether each cow is in proper condition. Such a method, called Beef Cow Condition Scoring, exists. It enables you to assess body condition and judge its adequacy. Once you arrive at condition scores for each animal, these scores can help you plan supplemental feeding programs to maintain productivity. This factsheet describes a scoring system that can be effectively used to assess body condition, to determine whether cows are too thin or too fat and to make feeding and management decisions.

Importance of Body Condition

Beef cows must:

- have a healthy body,
- produce milk for the calf,
- rebreed for another calf, and
- in the case of heifers, continue growing.

How well the cow or heifer meets these expectations partly depends on her genetic capabilities, but environment is even more important. Nutrition is the environment's most important component. A cow underfed over a long period will lose weight, both fat and muscle. If underfeeding continues the cow's body will take drastic measures to conserve

available nutrients. If she is nursing a calf and not yet rebred, her ovaries will become reproductively "dormant" and remain so until nutrition improves. Such cows will not exhibit estrus or rebreed during these periods. If a cow continues to lose body weight and if energy is not provided, she will gradually produce less milk, and at the extreme, stop producing entirely. When the cow's energy out-go exceeds the intake, certain functions begin to cease in this order: the cow first loses weight, then ceases to reproduce, lessens milk production and ultimately dies.

Body Condition Scores are numbers used to suggest the cow's relative fatness or thinness. Most often a scoring range of 1 to 9 is used, with a score of 1 being very thin and 9 extreme fatness. A thin cow is very sharp, angular and bony, while a fat one is smooth and boxy with bone structure hidden from sight or touch. The figures on the inside of this fact sheet describes the 1-9 condition scoring standards. For scores to be more helpful, producers need to adapt the system to their own conditions. The following table describes how reproductive performance may vary as body condition changes.

Table 1. Rebreeding and Condition Scoring of Beef Cows

| Item | Condition Score at Calving | | | |
|---|----------------------------|-----|-----|-----|
| | 4 | 5 | 6 | 7 |
| Cows Pregnant After First Breeding | 4% | 15% | 36% | 65% |
| Cows Pregnant After 60 days of Breeding | 24% | 51% | 69% | 87% |

(From: Ritchie, H.D.)

Obese cows also have liabilities. One research study (Arnett, et al.) compared 24 twins, half which

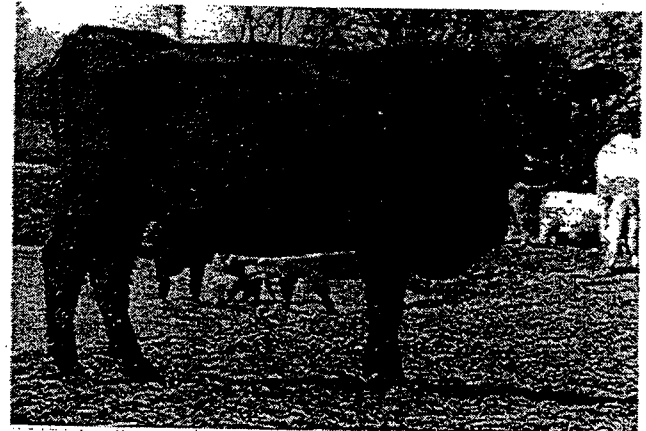
Table 2. Body Condition Scoring (BCS) for Beef Cows

| Group | BCS | Description |
|----------------------|-----|---|
| Thin Condition | 1 | Emaciated , Emaciation with no fat detectable over spine, hips, or ribs. Tailhead and ribs project prominently. |
| | 2 | Poor , still emaciated but tailhead and ribs are less prominent. Spine still sharp but there is some tissue over the spine. |
| | 3 | Thin , ribs still identifiable but not as sharp to the touch. Some fat along the spine and over the tailhead. |
| Borderline Condition | 4 | Borderline , individual ribs no longer obvious. The spine is still prominent but feels round rather than sharp. There is some fat cover over the ribs and hip bones. |
| Good Condition | 5 | Moderate , good overall appearance. Fat cover over the ribs feels spongy and areas on either side of the tailhead have fat cover. |
| | 6 | Moderate plus , firm pressure must be applied to feel the spine. A high amount of fat is present over the ribs and around the tailhead. |
| | 7 | Good , cow appears fleshy and carries some fat. Spongy fat cover over the ribs and around the tailhead. Fat patches are becoming obvious. |
| Fat Condition | 8 | Fat , fleshy and overconditioned. Spine almost impossible to palpate. Large fat deposits over ribs, around tailhead, below vulva. Patchy fat. |
| | 9 | Extremely fat , wasty, patchy, and blocky. Tailhead and hips buried in fat. Bone structure no longer visible. Animal's mobility possibly impaired. |

(Adapted from Richard, et al., 1986)



BCS-1



BCS-2



BCS-3



BCS-4